

Claims

1. A method for determining gastric cancer or a related condition in a sample,
comprising assaying said sample for a sterol carrier protein-X/sterol carrier protein-2 protein
or a Protein Kinase B/AKT protein, presence of said protein in said sample being indicative
5 of the gastric cancer or the condition.
2. The method of claim 1, wherein the sterol carrier protein-X/sterol carrier protein-2
protein is encoded by a nucleic acid molecule comprising a nucleotide sequence selected from
the group consisting of SEQ ID NOs:19, 20, 21, and 22.
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3. The method of claim 1, comprising assaying said sample for a peptide derived from
said sterol carrier protein-X/sterol carrier protein-2 protein.
4. The method of claim 1, comprising assaying said sample for an antigenic fragment of
15 said sterol carrier protein-X/sterol carrier protein-2 protein.
5. The method of claim 1, wherein the protein is assayed using an antibody that
specifically binds sterol carrier protein-X/sterol carrier protein-2.
- 20 6. The method of claim 1, wherein the Protein Kinase B/AKT protein is encoded by a
nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of
SEQ ID NOs:13 and 14.
7. The method of claim 1, comprising assaying said sample for a peptide derived from
25 said Protein Kinase B/AKT protein.
8. The method of claim 1, comprising assaying said sample for an antigenic fragment of
said Protein Kinase B/AKT protein.
- 30 9. The method of claim 1, wherein the protein is assayed using an antibody that
specifically binds Protein Kinase B/AKT.

10. A method for determining gastric cancer or a related condition in a sample, comprising assaying said sample for expression of a nucleic acid molecule which encodes sterol carrier protein-X/sterol carrier protein-2 or Protein Kinase B/AKT, as a determination of the gastric cancer or the related condition in said sample.

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11. The method of claim 10, wherein the nucleic acid molecule that encodes sterol carrier protein-X/sterol carrier protein-2 comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs:19, 20, 21, and 22.

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12. The method of claim 10, wherein the nucleic acid molecule that encodes Protein Kinase B/AKT comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs:13 and 14.

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13. A method for determining gastric cancer or a related condition in a sample, comprising assaying said sample for an antibody that specifically binds sterol carrier protein-X/sterol carrier protein-2 or Protein Kinase B/AKT, as a determination of the condition in said sample.

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14. The method of claim 13, wherein the sterol carrier protein-X/sterol carrier protein-2 is encoded by a nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NOs:19, 20, 21, and 22.

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15. The method of claim 13, wherein the antibody is assayed using sterol carrier protein-X/sterol carrier protein-2 or an antigenic fragment thereof.

16. The method of claim 13, wherein the Protein Kinase B/AKT is encoded by a nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NOs:13 and 14.

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17. The method of claim 13, wherein the antibody is assayed using Protein Kinase B/AKT or an antigenic fragment thereof.

18. A method for determining regression, progression or onset of a gastric cancer or a related condition, comprising monitoring a sample from a patient with said gastric cancer or related condition for a parameter selected from the group consisting of (i) a sterol carrier protein-X/sterol carrier protein-2 or Protein Kinase B/AKT protein, (ii) a peptide derived
5 from said protein and (iii) cytolytic T cells specific for a peptide derived from said protein and an MHC molecule to which the peptide is bound, which is indicative of progression or regression or onset of said gastric cancer or a related condition.

19. The method of claim 18, wherein said sample is a body fluid or effusion.

20. The method of claim 18, wherein said sample is a tissue.

21. The method of claim 18, wherein monitoring comprises contacting said sample with an antibody that specifically binds with said protein or peptide.

22. The method of claim 21, wherein said antibody is labeled with a radioactive label or an enzyme.

23. The method of claim 21, wherein said antibody is a monoclonal antibody.

24. The method of claim 18, comprising amplifying RNA which codes for said protein.

25. The method of claim 24, wherein said amplifying comprises carrying out polymerase chain reaction.

26. The method of claim 18, comprising assaying said sample for said peptide.

27. The method of claim 18, comprising contacting said sample with a nucleic acid molecule which specifically hybridizes to a nucleic acid molecule which codes for or
30 expresses said sterol carrier protein-X/sterol carrier protein-2 protein.

28. The method of claim 27, wherein the nucleic acid molecule comprises a nucleotide

sequence selected from the group consisting of SEQ ID NOs:19, 20, 21, and 22.

29. The method of claim 18, comprising contacting said sample with a nucleic acid molecule which specifically hybridizes to a nucleic acid molecule which codes for or
5 expresses said Protein Kinase B/AKT protein.

30. The method of claim 29, wherein the nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs:13 and 14.

10 31. A method for following progress of a therapeutic regime designed to alleviate gastric cancer or a related condition, comprising:

(a) assaying a sample from a subject to determine level of a parameter selected from the group consisting of (i) a peptide derived from a sterol carrier protein-X/sterol carrier protein-2 or a Protein Kinase B/AKT protein, (ii) a cytolytic T cell specific for cells
15 presenting said peptide, and (iii) an antibody which specifically binds to said peptide of said protein, at a first time period;

(b) assaying level of the parameter selected in (a) at a second period of time and comprising it to the level determined in (a) as a determination of effect of said therapeutic regime.

20 32. The method of claim 31, wherein the condition is gastric cancer.